



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D206-642-311BL
Job Sheet 186087



Part No: D206-642-311BL

Job Qty: 1 ea

Part Name: Skidtube LH (Ael Blue)



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/9/18

Job Tracking No:

Due Date: 12/14/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG REV Q SHEETS 29-30 IPP Rev:J 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM/EC IPP Rev:K 07-12-04 ECN 1080p DD verified by:ec IPP Rev:L 08-09-29 as per DSI9421 DD verified by:EC IPP Rev:M as per REV.N DD 10.04.19 verified by:EC IPP Rev:N 14.04.25 ECN14-520 DD verf:JLM IPP REV:O 15.10.09 ADDED BL DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		12/14/18	0.00	0.00	Start Up Stores/Pkg-1		NOV 30 2018
110	Packaging	1 pcs		12/14/18	0.00	0.00	Packaging1-2		NOV 30 2018
120	QC	1 pcs		12/14/18	0.00	0.00	QC4	DEC 11 2018	DAS 69
125	DC	1 pcs		12/14/18	0.00	0.00	DC		DAS 9-89 69
130	Packaging	1 pcs		12/14/18	0.00	0.00	Packaging3-1	DEC 11 2018	DEC 1 2018
140	QC21-FG	1 Ea		12/14/18	0.00	0.00	QC21		DEC 1 2018

Part Op 110 - Pick Kit

Descriptions: 120 - QC4- 100% Inspect kits for completeness

125 - Document Control Photocopy bluefile and create labels per PPP D206-642-311 CHG008

130 - Identify as per dwg & Stock Location: _____ Identify and pack for shipping as per PPP D206-642-311 Location: _____
PPP Rev: _____

140 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN3-41A	Bolt	8 Ea (8 ea)	90-Start up Operation	5038750
AN4-6A	Bolt	12 Ea (12 ea)	90-Start up Operation	5053945
AN4C5A	Bolt	1 Ea (1 ea)	90-Start up Operation	5019407
AN5-10A	Bolt	4 Ea (4 ea)	90-Start up Operation	3089282
AN5-11A	Bolt	8 Ea (8 ea)	90-Start up Operation	5063927
AN5-12A	Bolt	4 Ea (4 ea)	90-Start up Operation	5003926
D206-642-341BL	Replacement Skidtube (Fits LH or RH)	1 Ea (1 ea)	90-Start up Operation	5128173
D206-648-013BL	Ground Handling Wheel Modification	1 Ea (1 ea)	90-Start up Operation	5136788
D2652	Bushing	16 Ea (16 ea)	90-Start up Operation	5122721
D2712	Set Screw	10 Ea (10 ea)	90-Start up Operation	5059551
D2932-1BL	Saddle LH Out, 206	1 Ea (1 ea)	90-Start up Operation	5014894
D2933-1BL	Saddle LH In, 206	1 Ea (1 ea)	90-Start up Operation	5130493
D2934	Saddle Spacer	2 Ea (2 ea)	90-Start up Operation	5054584
D2935	Saddle Spacer	2 Ea (2 ea)	90-Start up Operation	5054582
D2938-1BL	Saddle LH Out, 206	1 Ea (1 ea)	90-Start up Operation	5131090
D2939-1BL	Saddle LH In, 206	1 Ea (1 ea)	90-Start up Operation	5016548

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>			Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																									
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																									
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																									
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																									
Large Fab ☐	Composite ☐	Supplier ☐																																										
Date : _____	Step #: _____	QTY Effective : _____	MRB (QSI042) Approval																																									
Description Work Order Deviation		Disposition		Completed By _____																																								
Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL.: 1 813 632-5200 Email: sales@dartero.com www.dartaerospace.com Container No: S136872 Part: D206-642-311BL Job No: 186087 Serial No/Batch: S136872 Revision: _____ Inspector: _____ Exp Date: _____ Instructions: TC STC SH98-4 Issue 2, EAA, STG SA00475SI				Lead hand / Supervisor Approval Verification																																								
				QC / QA Coordinator Approval																																								
FAULT CATEGORY																																												
<table style="width:100%; border: none;"> <tr> <td style="border: none;">☐ Pressure/Forced</td> <td style="border: none;">☐ Temperature/Cure</td> <td style="border: none;">☐ Power Loss/Surge</td> <td style="border: none;">☐ Positioned Wrong</td> </tr> <tr> <td style="border: none;">☐ Bending</td> <td style="border: none;">☐ Set-up</td> <td style="border: none;">☐ Folio/Program</td> <td style="border: none;">☐ Outside Dimensions</td> </tr> <tr> <td style="border: none;">☐ Centre Not Concentric</td> <td style="border: none;">☐ BOM/Route</td> <td style="border: none;">☐ Grain</td> <td style="border: none;">☐ Over/Under tolerance</td> </tr> <tr> <td style="border: none;">☐ Cracks</td> <td style="border: none;">☐ Broken/Damage/Defect</td> <td style="border: none;">☐ Weld</td> <td style="border: none;">☐ Part Incorrect</td> </tr> <tr> <td style="border: none;">☐ Crimp/Kink/Ripple/Wave</td> <td style="border: none;">☐ Inspection Incomplete/Unqualified</td> <td style="border: none;">☐ Wrong Stock Pulled</td> <td style="border: none;">☐ Part Lost/Missing</td> </tr> <tr> <td style="border: none;">☐ Cuffs</td> <td style="border: none;">☐ Contamination</td> <td style="border: none;">☐ Out of Sequence</td> <td style="border: none;">☐ Part Moved</td> </tr> <tr> <td style="border: none;">☐ Crushing</td> <td style="border: none;">☐ Countersink</td> <td style="border: none;">☐ Off-set</td> <td style="border: none;">☐ Drawing</td> </tr> <tr> <td style="border: none;">☐ Heat Treat</td> <td style="border: none;">☐ Cut Too Short</td> <td style="border: none;">☐ Mislabeled</td> <td style="border: none;">☐ Finish</td> </tr> <tr> <td style="border: none;">☐ Wave/Twist in Tube</td> <td style="border: none;">☐ Instructions Incomplete/Unclear</td> <td style="border: none;">☐ Fit/Function</td> <td style="border: none;">☐ Misread</td> </tr> <tr> <td style="border: none;">☐ Marks/Chatter</td> <td style="border: none;">☐ Drill Holes</td> <td style="border: none;">☐ Misaligned/off center</td> <td style="border: none;">☐ Turning Sequence</td> </tr> </table>					☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence
☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong																																									
☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions																																									
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance																																									
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect																																									
☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing																																									
☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved																																									
☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing																																									
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish																																									
☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread																																									
☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence																																									
<table style="width:100%; border: none;"> <tr> <td style="border: none;">☐ Internal Transport</td> <td style="border: none;">☐ Poor Information</td> <td colspan="2"></td> </tr> <tr> <td style="border: none;">☐ Tribal Knowledge</td> <td style="border: none;">☐ Rushing</td> <td colspan="2"></td> </tr> <tr> <td style="border: none;">☐ LOA</td> <td style="border: none;">☐ Product Improvement</td> <td colspan="2"></td> </tr> <tr> <td style="border: none;">☐ Substation</td> <td style="border: none;">☐ Process Improvement</td> <td colspan="2"></td> </tr> <tr> <td style="border: none;">☐ Past Expiry Date</td> <td style="border: none;">☐ Manufacturing Process</td> <td colspan="2"></td> </tr> <tr> <td style="border: none;">☐ Misidentified</td> <td style="border: none;">☐ Past Due</td> <td colspan="2"></td> </tr> </table>					☐ Internal Transport	☐ Poor Information			☐ Tribal Knowledge	☐ Rushing			☐ LOA	☐ Product Improvement			☐ Substation	☐ Process Improvement			☐ Past Expiry Date	☐ Manufacturing Process			☐ Misidentified	☐ Past Due																		
☐ Internal Transport	☐ Poor Information																																											
☐ Tribal Knowledge	☐ Rushing																																											
☐ LOA	☐ Product Improvement																																											
☐ Substation	☐ Process Improvement																																											
☐ Past Expiry Date	☐ Manufacturing Process																																											
☐ Misidentified	☐ Past Due																																											
OTHER : _____																																												

D3407-043BL	Tow Ring, Blue Prime/Paint	1 Ea (1 ea)	90-Start up Operation	5013079
D3413-1BL	O-Ring	1 Ea (1 ea)	90-Start up Operation	5049855
D3456-1	Washer	1 Ea (1 ea)	90-Start up Operation	5079335
D3457-1	Washer	2 Ea (2 ea)	90-Start up Operation	5088582
MS21042L3	Nut	8 Ea (8 ea)	90-Start up Operation	5094592
MS21042L4	Nut	12 Ea (12 ea)	90-Start up Operation	5109736
MS21043-4	Nut	1 Ea (1 ea)	90-Start up Operation	5092790
NAS1149C0463R	Washer	1 Ea (1 ea)	90-Start up Operation	5104373
NAS1149D0363J	Washer	8 Ea (8 ea)	90-Start up Operation	5107782
NAS1149D0463J	Washer	25 Ea (25 ea)	90-Start up Operation	5092780
NAS1149D0563J	Washer	8 Ea (8 ea)	90-Start up Operation	5050053

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	AN3-41A	8	122	0
	AN4-6A	12	726	0
	AN4C5A	1	62	0
	AN5-10A	4	253	0
	AN5-11A	8	88	0
	AN5-12A	4	357	0
	D206-642-341BL	1	0	0
	D206-648-013BL	1	0	0
	D2652	16	253	0
	D2712	10	537	0
	D2932-1BL	1	1	0
	D2933-1BL	1	1	0
	D2934	2	57	0
	D2935	2	62	0
	D2938-1BL	1	1	0
	D2939-1BL	1	1	0
	D3407-043BL	1	15	0
	D3413-1BL	1	4	0
	D3456-1	1	159	0
	D3457-1	2	43	0
	MS21042L3	8	2,035	0
	MS21042L4	12	2,459	0
	MS21043-4	1	792	0
	NAS1149C0463R	1	487	0
	NAS1149D0363J	8	2,153	0
	NAS1149D0463J	25	3,231	0
	NAS1149D0563J	8	1,372	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

4.5 206 L/L-1/L-3/L-4/407 LOW & HIGH GEAR SKIDTUBES

ITEM	QTY -311	QTY -312	QTY -313	QTY -314	QTY -341	QTY -357	QTY -349	QTY -351	QTY -013	PART NUMBER	DESCRIPTION
	X									D206-642-311	SKIDTUBE INSTALLATION, LH
		X								D206-642-312	SKIDTUBE INSTALLATION, RH
			X							D206-642-313	SKIDTUBE INSTALLATION, LH
				X						D206-642-314	SKIDTUBE INSTALLATION, RH
1	1	1			X					D206-642-341	SKIDTUBE
						X				D206-642-357	WEARSHOE KIT (REPLACES -347)
							X			D206-642-349	RUN-ON LANDING WEARPLATE KIT
			1	1				X		D206-642-351	SKIDTUBE
1	1	1	1	1					X	D206-648-013	GROUND HANDLING KIT
1					1					D2650-5	SKIDTUBE ASSEMBLY
1								1		D4361-041	SKIDTUBE ASSEMBLY
2A					14			4		D2651-1	* PLUG ⁽¹⁾
2B					14			4		D2651-3	* O-RING ⁽¹⁾
3					1			1		D2646	* AFT CAP ⁽¹⁾
4					2			2		MS27039-1-08	* SCREW ⁽¹⁾
5					2			2		NAS1149D0332J	* WASHER ⁽¹⁾ (OR AN960JD10L)
6	1		1							D2932-1	SADDLE, FWD OUT, LH
6		1		1						D2932-2	SADDLE, FWD OUT, RH
7	1		1							D2933-1	SADDLE, FWD IN, LH
7		1		1						D2933-2	SADDLE, FWD IN, RH
8	1		1							D2938-1	SADDLE, AFT OUT, LH
8		1		1						D2938-2	SADDLE, AFT OUT, RH
9	1		1							D2939-1	SADDLE, AFT IN, LH
9		1		1						D2939-2	SADDLE, AFT IN, RH
10	8	8	8	8						AN3-41A	BOLT
11	16	16	16	16						D2652	BUSHING
12A	8	8	8	8						MS21042-3	NUT (OR MS21042L3)
12B	8	8	8	8						NAS1149D0363J	WASHER (OR AN960JD10)
13	4	4	4	4						AN5-10A (OR AN5-11A)	* BOLT ⁽²⁾
14	4	4	4	4						AN5-11A (OR AN5-12A)	* BOLT ⁽²⁾
15	8	8	8	8						NAS1149D0563J	WASHER (OR AN960JD516)
16	12	12	12	12						AN4-6A	BOLT
17	24	24	24	24						NAS1149D0463J	WASHER (OR AN960JD416)
18	12	12	12	12						MS21042-4	NUT (OR MS21042L4)
20A					6	6				D3537-1	WEARPAD (REPLACES D2648-3)
21A					1	1				D3537-3	WEARPAD (REPLACES D3429-1)
22A					1	1				D4956-11	WEARSHOE (REPLACES D3535-11 + D3536-11)
23A					1	1				D4956-23	WEARSHOE (REPLACES D3535-23 + D3536-23)
24A					1	1				D4956-35	WEARSHOE (REPLACES D3535-35 + D3536-35)
26A					54	54				MS27039C1-08	SCREW
26B					54	54				NAS1149C0332R	WASHER (OR AN960C10L)
26C					54					ALS7-1032-130	* INSERT ⁽¹⁾ (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
30	1	1	1	1						D3407-043	TOW RING ASSEMBLY (REPLACES D2968-043)
32A	1	1	1	1						D3456-1	WASHER
32B	2	2	2	2						D3457-1	WASHER
33	1	1	1	1						MS21043-4	NUT
34	1	1	1	1						AN4C5A	BOLT
35	1	1	1	1						NAS1149C0463R	WASHER (OR AN960C416)
36	1	1	1	1						D3413-1	RING (REPLACES D2655)
37	10	10	10	10						D2712	SET SCREW
38	2	2	2	2						D2934	SADDLE SPACER
39	2	2	2	2						D2935	SADDLE SPACER
40									2	D3414-041	GHW LUG (REPLACES D2659)
41									4	AN3C37A	BOLT
42									8	D2652	BUSHING
43									4	MS21043-3	NUT
44									4	NAS1149C0363R	WASHER (OR AN960C10)

• COPYRIGHT © 2000 BY DART AEROSPACE USA, INC •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC

Revision: Q

Date: 13.08.12

